

Amendments to the Specification:

Please amend the specification as follows:

- On page 10, please replace the first full paragraph with the following:

The roller pitching life of a comparative steel was a level of 10^5 whereas it was confirmed that the life span of ~~the steel of the present invention~~ **steel as described herein** was extended ten times that of the comparative steel. The conditions of the roller pitching test are described below and the results of the test are shown in Table 1.

- On page 10, please replace "Table 1" with the following:

Table 1

No.	Application	Chemical ingredients (mass%)											
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Sol.B	Bi	Pb
1	<u>Invented Described Steel</u>	0.55	0.49	0.55	0.008	0.017	0.02	0.02	0.17	0.18	0.014	0.030	-
2		0.54	0.52	0.63	0.018	0.022	0.02	0.03	0.17	0.18	0.002	0.020	-
3		0.54	1.00	0.60	0.011	0.012	0.01	0.03	0.36	0.33	-	0.038	-
4		0.48	0.50	0.59	0.016	0.020	0.01	0.03	0.25	0.20	0.015	-	-
5		0.58	0.52	0.59	0.015	0.020	0.01	0.03	0.25	0.20	0.014	-	-
A	Comparative Steel	0.55	0.22	0.64	0.019	0.012	0.06	0.03	0.30	0.01	-	-	0.07
B		0.53	0.25	0.66	0.017	0.013	0.06	0.01	0.30	0.01	-	-	0.08
C		0.55	0.52	0.64	0.015	0.015	0.09	0.03	0.29	0.01	0.014	-	-
D		0.55	0.20	0.65	0.015	0.015	0.10	0.03	0.30	0.20	0.014	-	-

- On page 11, please replace “Table 2” with the following table:

Table 2

No.	Application	Deformation resistance in process of forging (MPa)					Hardness of normalized steel after forging (HRB)				
		Forging temperature (°C)					Rate of cooling from 850 °C (°C /min)				
		700	720	750	790	820	3	6	10	30	60
1	Invented Described Steel	320	315	298	272	248	92	93	95	97	103
2		-	-	-	-	-	-	-	-	-	-
3		352	350	340	306	274	93	94	96	98	108
4		290	288	277	256	240	91	92	94	96	101
5		324	325	308	282	262	93	93	95	96	104
A	Comparative Steel	316	312	273	245	240	91	92	92	92	95
B		-	-	-	-	-	-	-	-	-	-
C		-	-	-	-	-	-	-	-	-	-
D		-	-	-	-	-	-	-	-	-	-

- On page 11, please replace the first full paragraph (entitled “(Example 2)”) with the following:

(Example 2)

An outer race was produced from the steel having the composition shown in Table 1 according to the steps shown in Fig. 2. Although the hardness of steel as described herein ~~the steel of the present invention~~ at room temperature was higher than that of the comparative steel, the resistance to deformation during warm forging was not excessively high. The steel ~~of the present invention~~ was treated by warm forging without any problem.

- Please replace the first full paragraph on page 12 with the following:

Since the cooling rate of the normalizing condition ~~the invented steel of steel as described herein~~ is designed to be 3 to 10 °C/min, the same hardness as that of comparative steel ~~[[1]]~~ A which is conventional steel is obtained. The results of the measurement of the abrasion loss of tools during machining are shown in Table 4. A desired hardness can be obtained to provide sufficient machinability by optimizing the cooling rate in the normalizing

step. Moreover, Table 5 shows the results obtained by measuring the hardness of the hardened layer or surface layer of the part treated by induction hardening.

- Please replace the second full paragraph on page 12 with the following:

For the evaluation of surface fatigue strength, rotating endurance tests for three types of steel, namely the steels 1 and 2 ~~of the present invention~~ and the comparative steel [[1]] A were made in a state that these steels were each incorporated into a drive shaft. The results of the endurance test are shown in Fig. 3.

- Please replace the third full paragraph on page 12 with the following:

As shown in Fig. 3, it was confirmed that steel as described herein ~~the steel of the present invention~~ had high durable strength in actual working like the roller pitching test.

- Please replace "Table 3" on page 13 with the following:

Table 3

No.	Application	Condition of normalizing	Hardness of normalized steel after forging (HRB)
1	Invented Described Steel	Condition 1	94
2		Condition 1	94
3		Condition 2	95
4		-	-
5			
A	Comparative Steel	Condition 1	93
B		-	-
C		-	-
D		-	-

Condition 1: The steel sample is kept at 850 °C for 40 minutes, thereafter cooled to 550 °C at a cooling rate of 10 °C/min over 30 minutes and further allowed to cool in the air.

Condition 2: The steel sample is kept at 850 °C for 40 minutes, thereafter cooled to 550 °C at a cooling rate of 3.3 °C/min over 90 minutes, then kept at 550 °C for 30 minutes and then allowed to cool in the air.

- Please replace "Table 4" on page 13 with the following:

Table 4

No.	Application	Turning operation		
		VB wear rate at outer periphery	VB wear rate at inner periphery	Easiness of chip breaking
1	Invented Described Steel	0.27	0.20	Excellent
2		0.28	0.22	Good
3		0.33	0.18	Excellent
4		-	-	-
5		-	-	-
A	Comparative Steel	0.30	0.15	Excellent
B		-	-	-
C		-	-	-
D		-	-	-

- Please replace Table 5 on page 14 with the following table:

Table 5

No.	Application	Hardness of outer-race hardened by high-frequency induction hardening				Hardness at groove after 300°C tempering
		At groove		At axis		
		Surface hardness	ECD	Surface hardness	ECD	
1	Invented Described Steel	62 – 64	2.8	64 – 66	5.0	53 – 55
2		61 – 62	2.0	62 – 64	5.2	52 – 54
3		62 – 63	2.4	62 – 63	5.4	55 - 56
4		-	-	-	-	-
5		-	-	-	-	-
A	Comparative Steel	60 – 62	2.0	61 – 63	5.2	49 – 51
B		60 – 62	2.1	61 – 63	5.2	49 – 50
C		62 – 63	2.1	61 – 63	5.2	50 – 52
D		62 – 63	2.1	61 - 63	5.2	50 - 52

Unit of hardness : HRC

ECD : Effective case-hardened depth (mm)